

KHALID NAJAM

Applied AI Engineer | Enterprise AI Solutions | Agentic Systems

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PROFESSIONAL EXPERIENCE

Software Development Engineer III

May 2026 – Present

PeopleStrong (Majority stake acquired by Goldman Sachs Alternatives, Apr 2025)

Gurugram, India

- Own applied-AI and harness engineering for ATR, covering agent design, evidence tools, team onboarding, operator workflows, guardrails, production recovery, and outcome reporting.
- Built a configurable capability layer that turns each team's model, repositories, database connections, observability sources, and domain playbooks into an isolated workspace instead of a team-specific fork.
- Connected autonomous investigation to an Agent Console, preserving the conversation, delegated work, and tool evidence for human handoff, follow-up questions, and repeat diagnoses.
- Added a controlled path from diagnosis to action: writable coding workspaces are isolated, proposed diffs require agent review, and ticket comments or draft pull requests pass per-team gates and idempotency checks.
- Brought Payslip Agent onto the enterprise MCP platform with four registered tools, trusted session context, request-scoped employee identity, environment-based URL configuration, and focused contract tests.

Software Development Engineer II

Nov 2024 – Apr 2026

PeopleStrong

Gurugram, India

- Built a production-oriented payslip assistant in Python using FastAPI, LangChain, and Gemini, with streaming responses, tool execution, encrypted document retrieval, tax calculations, token tracking, and PII-safe logs.
- Broke the agent, tool, storage, middleware, and tax paths into focused async services; removed shared singleton state that could leak one request's context into another.
- Migrated payroll services from JDK 8 to JDK 17/WildFly, selected Rhino to replace Nashorn for formula execution, and corrected Hibernate 6.6 query compatibility.
- Delivered outbound reimbursement APIs and mobile workflows, handled P0/P1 production incidents, and completed repeated Snyk remediation across payroll modules.

Software Development Engineer

Jul 2022 – Nov 2024

PeopleStrong

Gurugram, India

- Built major releases across Loan, Investment V3, NPS V3, BRE, CTC, Variable Pay, and FBP in Java EE, Angular, and SQL Server, working across entity, service, REST, workflow, and UI layers.
- Delivered NPS V3 from first schema to production in eight weeks, including configuration, encrypted data handling, approval, discontinuation, date windows, and employee self-service.
- Replaced difficult-to-debug Drools reimbursement rules with explicit Java validation, and moved loan and BRE monetary fields from `Double` to `BigDecimal` across three repositories.
- Built Investment V3 tax workflows for Indian and international use cases, including property declarations, checker/approver flows, TDS/TCS, previous-year copy, and Thai multilingual support.

Software Engineer Intern

Jan 2022 – Jul 2022

PeopleStrong

Gurugram, India

- Built loan product configuration, eligibility and EMI rules, approval workflows, and employee/approver portals in Java and Angular; earned a pre-placement offer.

PROJECTS

ATR – Automatic Ticket Resolution System | *Harness Engineering, TypeScript, OpenCode SDK, Codex/GLM, 2026 PostgreSQL, React, Graphify, MCP*

- Engineered the agent harness as a durable execution layer across models, tools, skills, workspaces, and delegated agents, with capability-gated tool injection, isolated per-team runtimes, execution controls, persistent traces, recovery paths, and human continuation from the same investigation state.
- Designed the investigation flow around eight capability-gated agents: analyzer, qualifier, reproducer, config validator, runtime analyst, response reviewer, coder, and code reviewer. Competing hypotheses can run in parallel; response review remains the final evidence check.
- Combined Jira/DevRev intake with source repositories, SQL databases, Elastic, Grafana, New Relic, team knowledge, and code graphs. Missing capabilities remove the corresponding agent instead of sending it into a tool-less dead end.
- Unified autonomous runs and human chat on one per-team runtime. Live SSE events feed a durable trace, while polling remains the transcript source of truth; engineers can continue the exact investigation rather than restart it.
- Reworked graph persistence from one merged JSONB value to per-repository rows and a streaming merge after Postgres out-of-memory and JavaScript string-length failures; added bounded storage, atomic materialization, and recovery controls.

Payslip Agent – Employee Payroll Assistant | *Python, FastAPI, LangChain, Gemini, Redis, Elastic-2025 – 2026 search, SSE, MCP*

- Built four tools for payslip retrieval, protected-document decryption, content queries, and old/new-regime Indian income-tax calculation, including request-scoped context and **Decimal**-based financial math.
- Exposed the tools through MCP endpoints and registration metadata, validated the platform's **SessionToken**, derived trusted employee/org context, and kept the tax tool stateless when no user session is required.
- Added Redis cache expiry, encrypted storage flows, token-usage reporting, PII filtering, environment-specific endpoint configuration, and tests around registration and session validation.

RESEARCH EXPERIENCE

Research Intern – Artificial Intelligence

Jun 2021 – Jan 2022

Indian Institute of Technology Kharagpur

Kharagpur, India

- Developed volcanic-deformation classifiers using Sentinel-1 SAR imagery and PSInSAR data under Prof. Debashish Chakravarty.
- Compared AlexNet, ResNet, and autoencoder models, reporting 90%+ classification accuracy; tested augmentation and fine-tuning strategies and presented weekly findings to faculty.

EDUCATION

Kalinga Institute of Industrial Technology

Aug 2018 – May 2022

B.Tech., Electronics & Electrical Engineering; Minor in Data Analytics; CGPA: 8.0/10

Bhubaneswar, India

TECHNICAL SKILLS

Applied AI: Agentic systems, tool calling, RAG, MCP, prompt/skill design, human-in-the-loop evaluation, knowledge graphs, guarded automation

Models & AI Frameworks: Gemini/Vertex AI, LangChain, OpenAI API, OpenCode SDK, Graphify, PyTorch, scikit-learn

Languages: TypeScript, Python, Java, SQL/T-SQL, JavaScript

Application Engineering: FastAPI, Express, React, Java EE/EJB, JPA/Hibernate, Angular, REST, SSE

Data & Infrastructure: PostgreSQL, SQL Server, Redis, Elasticsearch, Docker, Kubernetes, GitHub Actions, Grafana, New Relic